We claim:

1. In a laser scanning system for determining frame or unibody alignment of a vehicle including at least one reflective laser beam target adapted for placement in a known relationship relative to a selected vehicle reference point, and laser scanning apparatus comprising a laser assembly operable to direct laser beams toward said target, and a detector for receiving reflected laser beams from said target, the improvement which comprises a laser assembly operable to direct a pair of individual laser beams spaced vertically from each other by a known distance toward said target.

2. The system of claim 1, said laser assembly including a pair of laser units, each laser unit comprising a pair of vertically spaced apart laser-generating devices.

3. The system of claim 1, said laser assembly being stationary, there being a pair of rotating mirrors respectively located on opposite sides of the laser assembly.

4. The system of claim 3, said laser assembly and said rotating mirrors located within a housing presenting transparent wall surfaces for passage of said laser beams therethrough.

5. The system of claim 3, each of said rotating members comprising an upright mirror having a relatively wide reflective surface and a relatively narrow reflective edge.

6. The system of claim 1, said detector located adjacent said laser assembly.

7. The system of claim 1, said laser assembly operable to direct each of said vertically spaced apart laser beams through a 360° sweep.

8. The system of claim 1, including a pair of upper lasers operable to generate one of said laser beams, and a pair of lower lasers operable to generate the other of said laser beams, said upper and lower laser pairs being spaced apart by a known distance.

9. The system of claim 1, including a microprocessor operably coupled with said scanning apparatus to calculate individual, upper and lower, three-dimensional spatial coordinates of said target using each of said vertically spaced apart beams respectively.

10. The system of claim 9, said target presenting first and second spaced-apart reflective stripes, said scanning apparatus and microprocessor generating four individual three-dimensional coordinates, namely a pair of upper coordinates corresponding to said first and second stripes, and a pair of lower coordinates corresponding to said first and second stripes.

11. The system of claim 10, said scanner and microprocessor operable to average said upper coordinate pair to give an averaged upper coordinate, and to average said lower coordinate pair to give an averaged lower coordinate.

12. The system of claim 11, said scanned microprocessor operable to average said averaged upper coordinate pair and said averaged lower coordinate pair to yield a coordinate for said target.

13. The system of claim 1, including a plurality of reflective laser beam targets each adapted for placement on said vehicle at predetermined reference points.

14. The system of claim 11, said targets being individually coded.

15. In a method of laser scanning for determining frame or unibody alignment of a vehicle including the steps of placing at least one reflective laser beam target in a known relationship relative to a selected vehicle reference point, laser scanning said target by directing laser beams from a source toward said target, and detecting reflected laser beams from said target, the improvement which comprises directing a pair of individual laser beams spaced vertically from each other by a known distance toward said target, and detecting the respective reflections therefrom.

16. The method of claim 15, including the step of providing as said source a laser assembly including a pair of laser units, each laser unit comprising a pair of vertically spaced apart laser-generating devices.

17. The method of claim 15, said source being stationary, and including the step of providing a pair of rotating mirrors respectively located on opposite sides of said source.

18. The method of claim 17, including the step of housing said source and mirrors within a housing presenting transparent wall surfaces for passage of said laser beams therethrough.

19. The method of claim 17, each of said rotating members comprising an upright mirror having a relatively wide reflective surface and a relatively narrow reflective edge.

20. The method of claim 15, including the step of locating said laser detector located adjacent said laser assembly.

21. The method of claim 15, including the step of causing said source to direct each of said vertically spaced apart laser beams through a 360° sweep.

22. The method of claim 15, said source including a pair of upper lasers operable to generate one of said laser beams, and a pair of lower lasers operable to generate the other of said laser beams, said upper and lower laser pairs being spaced apart by a known distance.

23. The method of claim 15, including the step of calculating individual, upper and lower, three-dimensional spatial coordinates of said target using each of said vertically spaced apart beams respectively.

24. The method of claim 23, said target presenting first and second spaced-apart reflective stripes, and including the step of calculating four individual three-dimensional coordinates, namely a pair of upper coordinates corresponding to said first and second stripes, and a pair of lower coordinates corresponding to said first and second stripes.

25. The method of claim 24, including the step of averaging said upper coordinate pair to give an averaged upper coordinate, and averaging said lower coordinate pair to give an averaged lower coordinate.

26. The method of claim 25, including the step of averaging said averaged upper coordinate pair and said averaged lower coordinate pair to yield a coordinate for said target.

27. The method of claim 15, including the step of placing a plurality of reflective laser beam targets on said vehicle at predetermined reference points.

28. The method of claim 27, said targets being individually coded.

29. A laser scanning apparatus for determining frame or unibody alignment of a vehicle comprising:

an enclosed housing presenting a pair of elongated, opposed laser-transparent panels;

a laser assembly located within said housing;

a pair of upright, rotatable mirrors within said housing and on opposite sides of said laser assembly,

said laser assembly and mirrors operable to direct laser beams through said panels and toward a vehicle-mounted target; and

a detector for receiving reflected laser beams from said target, said detector located within the housing.

30. The apparatus of claim 29, said laser assembly including upper and lower, vertically spaced apart laser sources operable to direct respective, vertically spaced apart laser beams through said panels and towards said vehicle-mounted target.